

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 12, line 6 through line 16 with the following paragraph:

With respect to the top-most (as shown) receive chain portion 72, coupled to a top-most (as shown) receive antenna 22, the received data is filtered by a receive filter 52. Here, the functionality of the receive filters are separately represented at each of the receive chain portions. Again, subsequent to receive ~~filtering operations~~ filtering operations performed upon the detected data, joint channel estimation is performed by a channel estimator 54. The channel estimator performs channel estimation functions and, thereafter, values are provided to a joint optimizer 74. Other receive chain portions of the receiving station also include corresponding joint optimizer and are coupled to receive indications of values formed by the channel estimator. And, correspondingly, other receive chain portions provide indications of channel estimations performed at such other receive chain portions to the joint optimizer 74 of the top-most (as shown) receive chain portion. The joint optimizer 74 of the receive chain portion define the apparatus 78 of an embodiment of the present invention. Each joint optimizer operates, in manners that shall be described in greater detail below, to generate optimal parameter values to be used for subsequent operations at the receive chain portion.

Please replace the paragraph beginning on page 15, line 7 through line 9 with the following paragraph:

An MMSE-DFE structure of the prefilter/~~equilizer~~ equalizer pair is shown in Figure 3. There are two filters: the feedforward filter 88 which is the space-time prefilter \mathbf{w}_{ff} and the feedback filter 92 \mathbf{w}_{bf} . At time k , the signal at the input of the MLSE equalizers is: